

LOCATION HYDRAULIC STUDY FORM

Dist. Co. Rte. K.P. Bridge No. 2 Floodplain Description:
1. Description of Proposal (include any physical barriers i.e. concrete barriers, soundwalls, etc. and design elements to minimize floodplain impacts)
2. ADT: Current 99,000 Projected 10000
3. Hydraulic Data: Base Flood Qtoom³/s WSB1000 The flood of record, if greater than Qtoo:
O= m ³ /s WSF= Overtopping flood Q= m ³ /s WSE= Are NFIP maps and studies available? YES NO
4. Is the highway location alternative within a regulatory floodway? YESNO
5. Attach map with flood limits outlined showing all buildings or other improvements within the base floodplain.
Potential Q100 backwater damages:
A. Residences? NO YES B. Other Bldgs? NO YES C. Crops? NO YES D. Natural and beneficial
FLOODPLAIN VALUES? NO. Y YESYES
6. Type of Traffic:
A. Emergency supply or evacuation route? NO YES X Total and labeled B. Emergency vehicle access? NO YES X C. Practicable detour available? NO YES D. School bus or mail route? NO YES
7. Estimated duration of traffic interruption for 100-year event hours:
8. Estimated value of Q100 flood damages (if any) - moderate risk level.

A.	Roadway	\$	_ traffermedic	र राजने दर	sai labbe
В	Property	\$	- 1	1 6	4.2
	Total	\$	ester P. F.	8 2	3 - 8
9.	Assessment o	f Level of Risk	LowX Moderate High		
May b	be necessary to	determine desig	gn alternative. 🔍	سي	Study Risk Analysis
Signa (Item	ture – Dist. Hyo numbers 3,4,5,	iraulic Enginee 7,9)	r <u>(4.4663 3)</u>	<u> </u>	Date <u>E/ZE/</u> 2CC 7
incom	patible				nt, or any support of
Flood	plain developm	eni?	NO	:	
	, provide evalu: 23 CFR 650.113		ssion of practicabil	ity of alte	matives in accordance
Inforr Hydra	nation develops sulic Study shal	ed to comply will be retained in	ith the Federal req the project files.	uirement :	for the Location
Signa (Item	ture – Dist. Pro numbers 1,2,6,	ject Engineer_ 8)	<u> </u>	. 19 Tara I	Date 3/30/02

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EA	Av		No. Z. E.L		
Flood	plain Description:				
1. Des	scription of Proposal (include any walls, etc. and design elements to m	physical binimize flo	odplain imp	oncrete acts)	barriers,
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2. AD	T: Current 103,000)	Projected	176,6	<u> 200</u> 0
3. Hy	iraulic Data: Base Flood Q100-		m³/s		
	CO= The flood of record		than Q100:		
Over the	opping flood ()= 12/2 m ³ /s	wsp=			
Are N	opping flood Q= m³/s FIP maps and studies available?	YES	X.	_NO_	
4. Is t	he highway location alternative with YESNO		tory floodwa	у?	
	ach map with flood limits outlined si I the base floodplain.	howing all	buildings or	other in	nprovements
Poten	tial Q100 backwater damages:				
Α.	Residences? NO 🔀	YES_			
B.	Other Bldgs? NO × Crops? NO ×	YES	and the second of the second o		
C.		YES			
D.	Natural and beneficial				
	FLOODPLAIN VALUES	NO	XYES	and the state of t	
6. Tvi	pe of Traffic:				
			* ****		
	nergency supply or evacuation route		YES.		_I I planutus ner ayılıkk
	nergency vehicle access?	NO	YES		annersy (
C. Practicable detour available? D. School bus or mail route?		NO	YES		· ·
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7. Est	imated duration of traffic interruption	n for 100-y	ear event ho	urs:	AND
Q 10 n4	imated value of Q100 flood damages	(if anv) n	noderate risk	ievel.	
O. ES	mand same or Am moor gamages	(vr (417)2) y			

A. B	Roadway Property Total	\$ \$ \$	Trifes med				
9.	Assessment of	Level of Risk	Low X Moderate High				
May b	e necessary to	letermine desig	1			1	
Signati (Item 1	ure – Dist. Hyd numbers 3,4,5,7	raulic Engineer 7,9)			_Date_ <i>_</i>	ZE12007	
incom			nt, significant en	croachment		port of	
If yes, provide evaluation and discussion of practicability of alternatives in accordance with 23 CFR 650.113							
Information developed to comply with the Federal requirement for the Location Hydraulic Study shall be retained in the project files.							
Signati	ure – Dist. Proj umbers 1,2,6,8	ect Engineer	<u> La con</u>	S	Date ^{>}	<u> 130</u> 400	

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Dist. Co. Co. Rte. Ci	_K.P	
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Floodplain Description:		
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Floodplain Description:	<u> </u>	and the state of t
1. Description of Proposal (include any p	ihysical barrier	es i.e. concrete dartiers,
soundwalls, etc. and design elements to min	imize floodpla	un impacts)
The Committee of the Co	nam f	
		osion of bilder floopkin
2. ADT: Current <u>17,000</u>	Projec	eted1.5 %,C & C
3. Hydraulic Data: Base Flood Q100-	2.2 m³/s	
WSE100 20 The flood of record, i		
Q=		
Overtopping flood Qm3/s	WSB=	
Are NFIP maps and studies available?	YES	NO
4. Is the highway location alternative within		ioodway ?
YES NO X	-	
5. Attach map with flood limits outlined sho within the base floodplain.	wing all buildi	ings or other improvements
Potential Q100 backwater damages:		
A. Residences? NO	YES	
B. Other Bldgs? NO 🔀	YES	makapa
B. Other Bldgs? NO K C. Crops? NO K	YES	
D. Natural and beneficial		
FLOODPLAIN VALUES?	NO	YES
6. Type of Traffic:		
A. Emergency supply or evacuation route?	NO	YES X Fortermedies met available
B. Emergency vehicle access?	NO	YES ×)
C. Practicable detour available?	NO	YES
D. School bus or mail route?	NO	YES
7. Estimated duration of traffic interruption	for 100-year e	vent hours:
8. Estimated value of Q100 flood damages (i	f any) – moder	ate risk level.

A. B	Roadway Property Total	\$ \$ \$	_ Tintermedica 	and a	raidaple U			
9.	Assessment o	f Level of Risk	Low_X Moderate High					
For High Risk projects, during design phase, additional Design Study Risk Analysis May be necessary to determine design alternative. Signature – Dist. Hydraulic Engineer Date P/28/2007 (Item numbers 3,4,5,7,9)								
Is there any longitudinal encroachment, significant encroachment, or any support of incompatible Floodplain development? NOYES								
If yes, provide evaluation and discussion of practicability of alternatives in accordance with 23 CFR 650.113								
Information developed to comply with the Federal requirement for the Location Hydraulic Study shall be retained in the project files.								
Signat	are – Dist. Pro numbers 1,2,6,	ject Engineer 8)	<u> </u>		DatcS/_	<u> 184</u> 6 - 7		